

Appln. No. 10/724,242
Amendment dated February 2, 2005
Reply to Office Action of August 3, 2004

Amendments to the Claims:

Please cancel claims 2 and 4 and amend claims 1, 3 and 5-8 as follows. The following listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claim 1 (Currently Amended). A fluorescence reader which detects fluorescence from a sample present on a carrier or in a solution, ~~said reader~~ comprising:

a light source which radiates parallel light;

5 a projection lens which converges the light from the light source;

an excitation pinhole disposed at a front-side focal position of the projection lens, which shapes the parallel light radiated from the light source;

10 an objective lens which ~~irradiates the sample with~~ permits the light converged at a rear-side focal position and radiated onto the sample to pass through the objective lens;

an image forming lens which forms fluorescence emitted from the sample and passed through the objective lens into an image;

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- 15 a light receiving pinhole disposed ~~[[in]]~~ at an image
forming position of the image forming lens; and
a detector which detects the fluorescence passed through the
light receiving pinhole,
wherein a shape of the excitation pinhole and a diameter of
20 the light receiving pinhole are changeable.

Claim 2 (Cancelled).

Claim 3 (Currently Amended). The fluorescence reader
according to claim 1, wherein a size of the image formed ~~[[in]]~~
at the image forming position of the image forming lens is
substantially equal to that of the light receiving pinhole.

Claim 4 (Cancelled).

- Claim 5 (Currently Amended). The fluorescence reader
according to claim 1, wherein the sample comprises a nucleic
acid, a reagent coupled with the nucleic acid, and a fluorescent
dyestuff coupled with ~~[[a]]~~ the nucleic acid or ~~[[a]]~~ the reagent
5 coupled with the nucleic acid.

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Claim 6 (Currently Amended). The fluorescence reader according to claim 5, ~~characterized in that~~ wherein at least a part of the nucleic acid or one or more parts are immobilized on the carrier, and the fluorescent dyestuff is coupled with the reagent peculiarly coupled with the nucleic acid.

Claim 7 (Currently Amended). The fluorescence reader according to claim 1, ~~wherein~~ which further comprises a specimen including the samples arranged at a certain interval on the carrier, and wherein the specimen moves every certain interval, and ~~[[the]]~~ measuring of the fluorescence and ~~[[the]]~~ moving of the specimen are repeated to measure a plurality of samples.